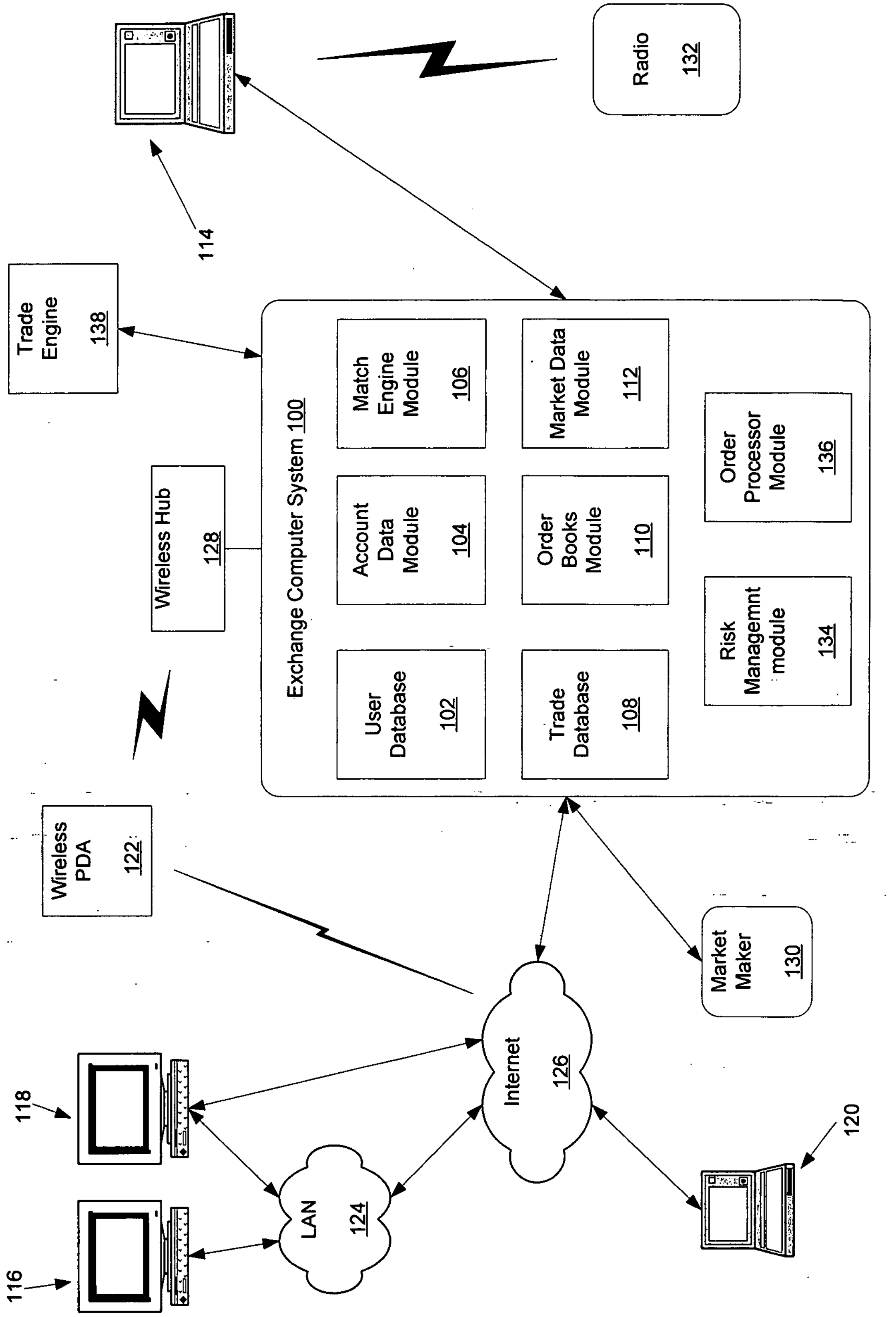
Radio 132
114
Trade Engine 138
Wireless Hub 128
Exchange Computer System 100
Match Engine Module 106
Account Data Module 104
User Database 102
Market Data Module 112
Order Books Module 110
Trade Database 108
Order Processor Module 136
Risk Managemnt module 134
Wireless PDA 122
Market Maker 130
118
116
LAN 124
Internet 126
120

Figure 1

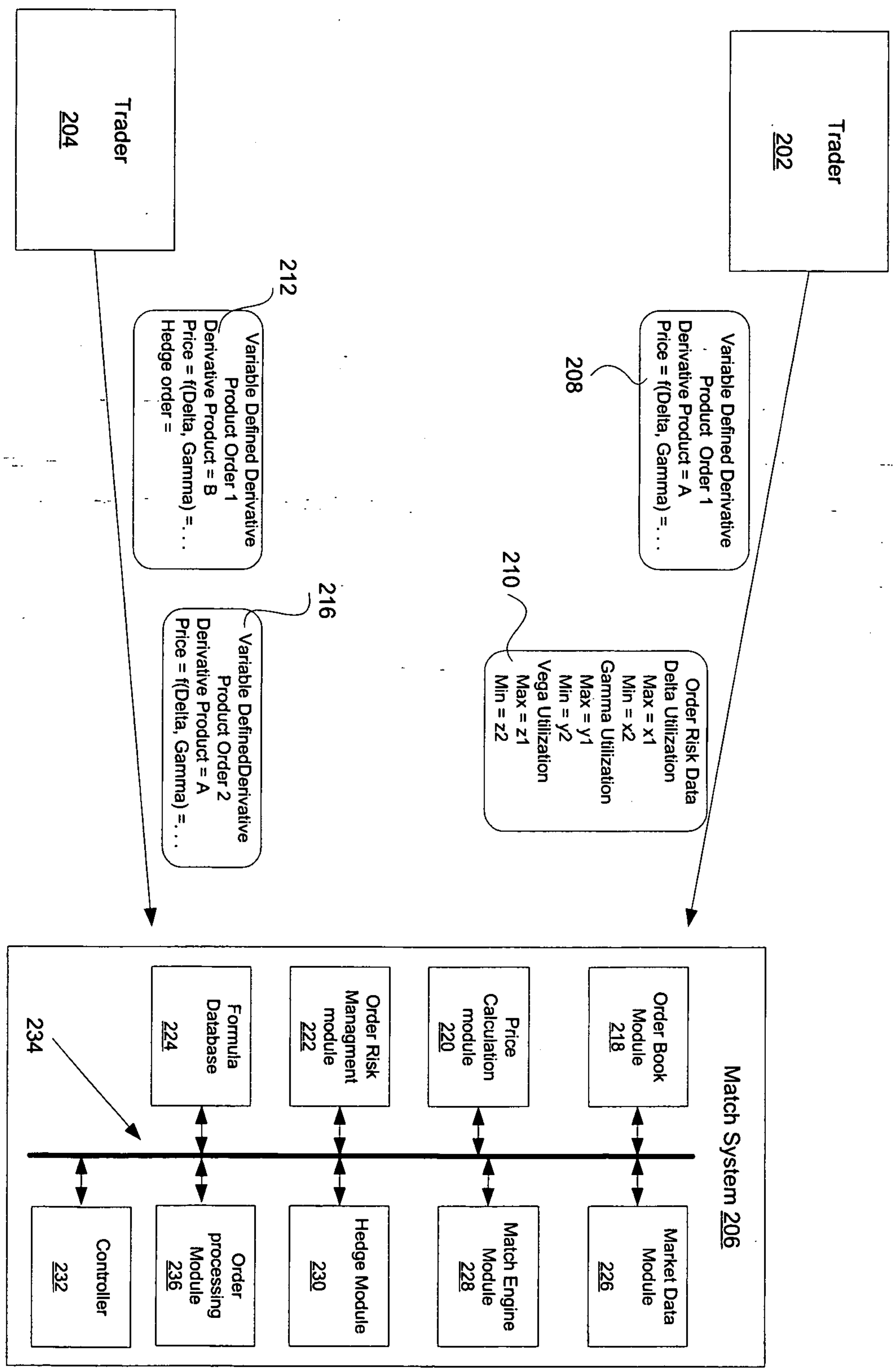
Trader
202
Trader
204
Variable Defined Derivative Product Order 1
Derivative Product = A
Price = f(Delta, Gamma) =. . .
208
Order Risk Data
Delta Utilization
Max = x1
Min = x2
Gamma Utilization
Max = y1
Min = y2
Vega Utilization
Max = z1
Min = z2
210
Variable Defined Derivative Product Order 1
Derivative Product = B
Price = f(Delta, Gamma) =. . .
Hedge order =
212
Variable DefinedDerivative Product Order 2
Derivative Product = A
Price = f(Delta, Gamma) =. . .
216
Match System 206
Order Book Module 218
Price Calculation module 220
Order Risk Managment module 222
Formula Database 224
Market Data Module 226
Match Engine Module 228
Hedge Module 230
Order processing Module 236
Controller 232
234

Figure 2

Order Risk Management Module 302

Calculation Module 306

Offset Module 308

304

| | Delta Utilization Threshold | Current Delta Utilization State | Gamma Utilization Threshold | Current Gamma Utilization State |
|---|---|---|---|---|
| Firm A | 200 | 160 | N/A | N/A |
| Office X | 120 | 100 | N/A | N/A |
| Trader 1 | 100 | 90 | N/A | N/A |
| Trader 2 | 20 | 10 | N/A | N/A |
| Office Y | 80 | 60 | N/A | N/A |
| Trader 3 | 50 | 40 | N/A | N/A |
| Trader 4 | 30 | 20 | N/A | N/A |
| Firm B | 400 | 395 | 100 | 40 |
| Trader 40 | 100 | 80 | 60 | 20 |

304a 304b 304c

Figure 3

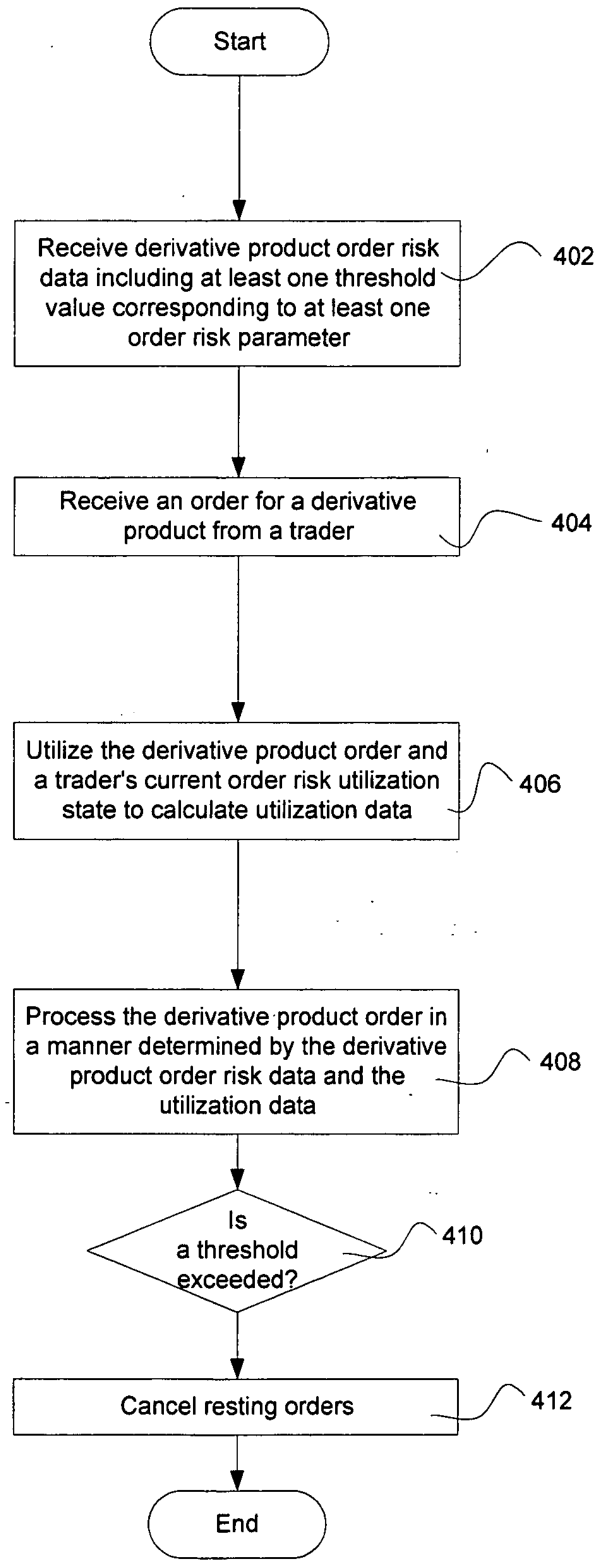
Start
Receive derivative product order risk data including at least one threshold value corresponding to at least one order risk parameter
402
Receive an order for a derivative product from a trader
404
Utilize the derivative product order and a trader's current order risk utilization state to calculate utilization data
406
Process the derivative product order in a manner determined by the derivative product order risk data and the utilization data
408
Is a threshold exceeded?
410
Cancel resting orders
412
End

Figure 4

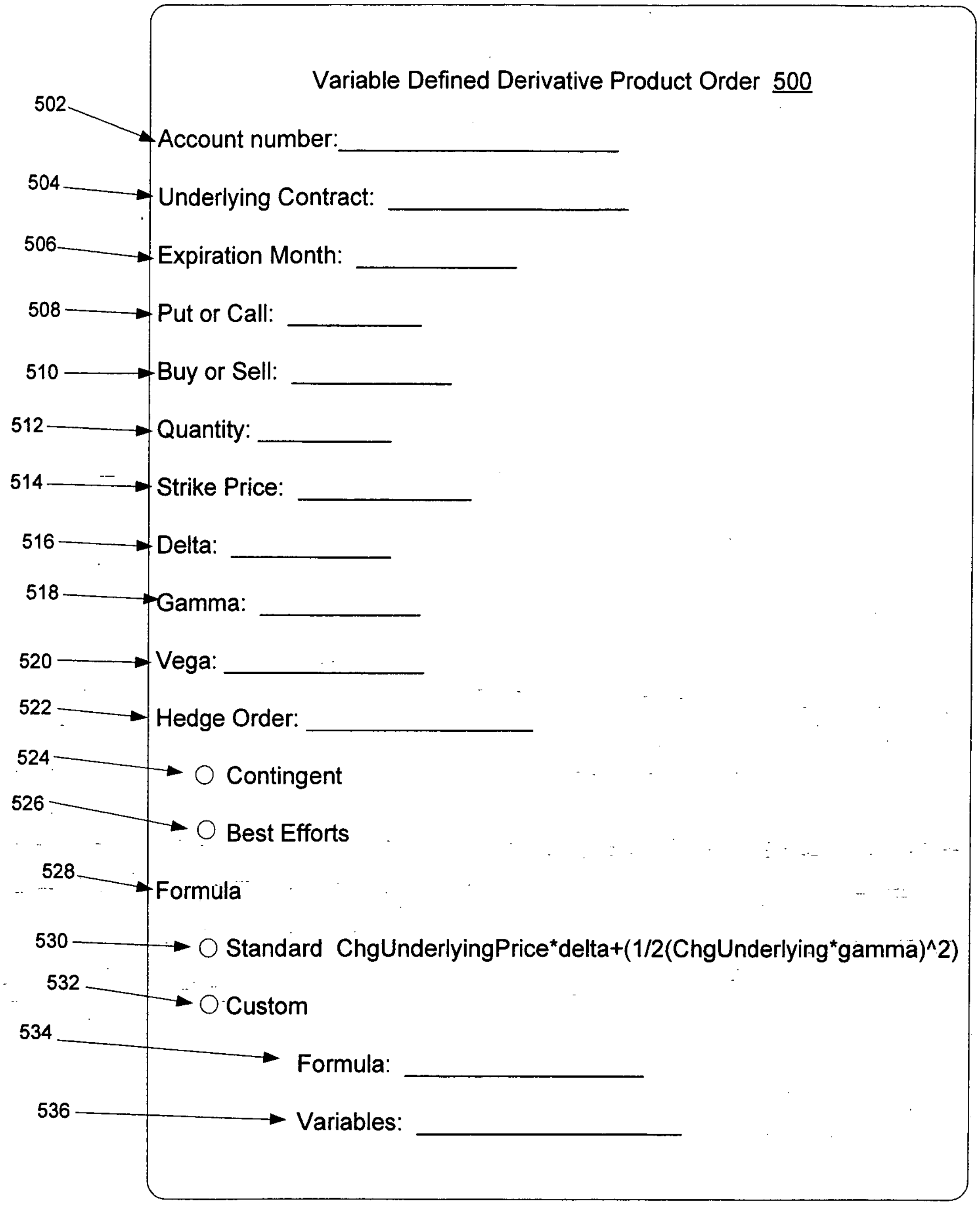
Variable Defined Derivative Product Order 500
502
Account number:
504
Underlying Contract:
506
Expiration Month:
508
Put or Call:
510
Buy or Sell:
512
Quantity:
514
Strike Price:
516
Delta:
518
Gamma:
520
Vega:
522
Hedge Order:
524
Contingent
526
Best Efforts
528
Formula
530
Standard ChgUnderlyingPrice*delta+(1/2(ChgUnderlying*gamma)^2)
532
Custom
534
Formula:
536
Variables:

Figure 5

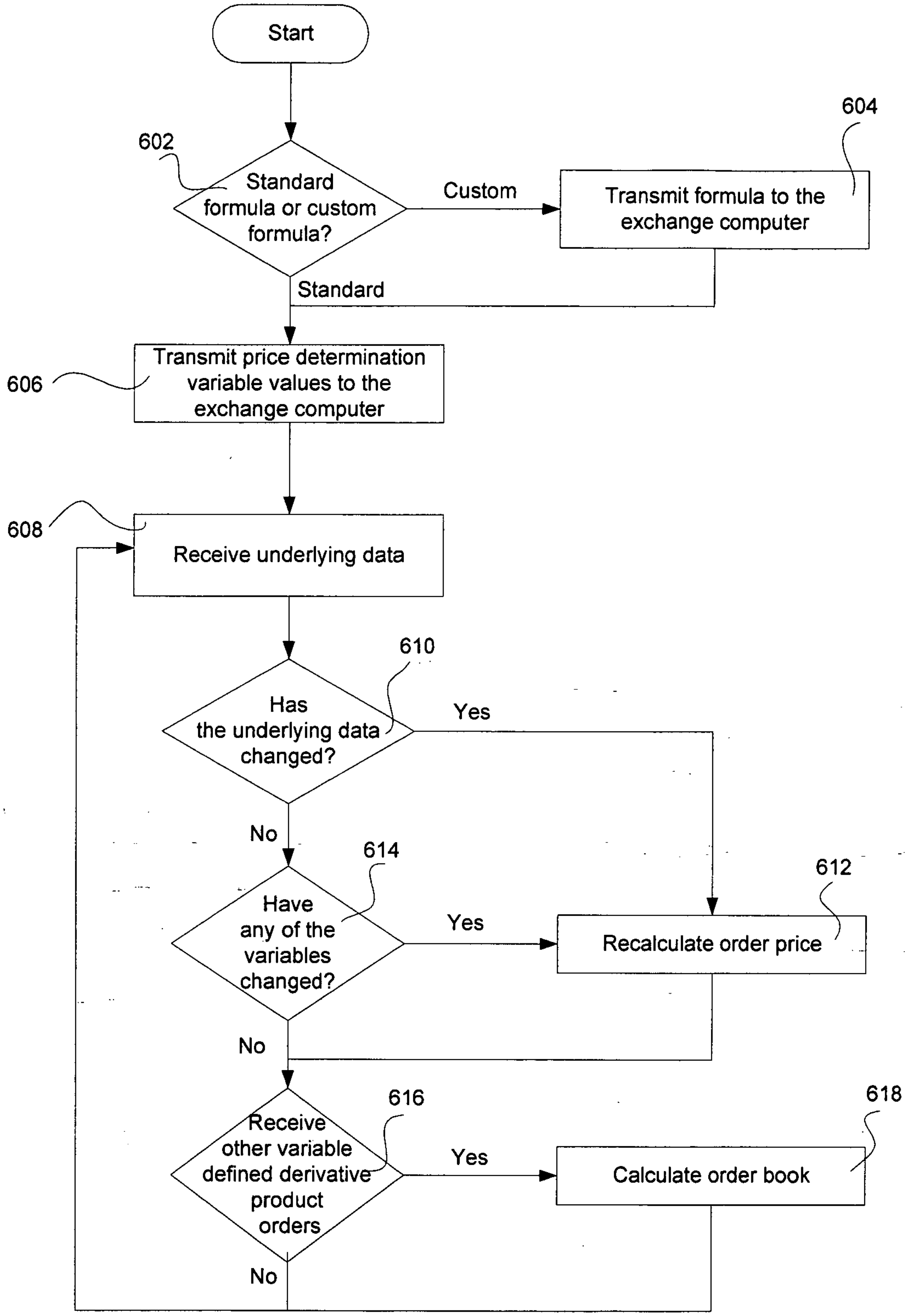
Start
602
Standard formula or custom formula?
Custom
604
Transmit formula to the exchange computer
Standard
606
Transmit price determination variable values to the exchange computer
608
Receive underlying data
610
Has the underlying data changed?
Yes
No
614
Have any of the variables changed?
Yes
612
Recalculate order price
No
616
Receive other variable defined derivative product orders
Yes
618
Calculate order book
No

Figure 6

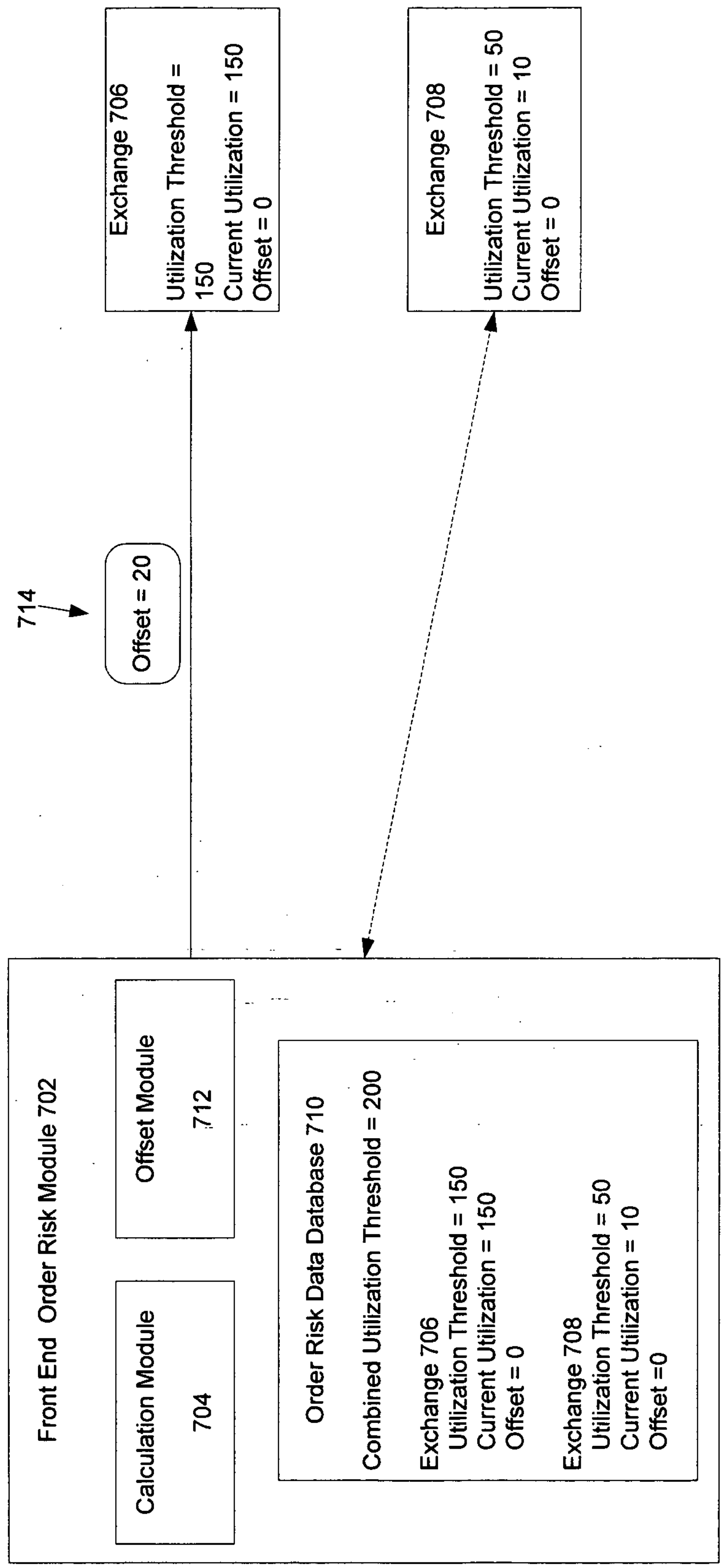
Exchange 706
Utilization Threshold = 150
Current Utilization = 150
Offset = 0
Exchange 708
Utilization Threshold = 50
Current Utilization = 10
Offset = 0
714
Offset = 20
Front End Order Risk Module 702
Calculation Module
704
Offset Module
712
Order Risk Data Database 710
Combined Utilization Threshold = 200
Exchange 706
Utilization Threshold = 150
Current Utilization = 150
Offset = 0
Exchange 708
Utilization Threshold = 50
Current Utilization = 10
Offset =0

Figure 7